

## PATENT COOPERATION TREATY

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## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 11197P1 WO/I		FOR FURTHER ACTION	See Form PCT/PEA/416
International application No. PCT/GB2004/003485	International filing date (day/month/year) 13.08.2004	Priority date (day/month/year) 16.08.2003	
International Patent Classification (IPC) or national classification and IPC A61L9/12			
Applicant RECKITT BENCKISER (UK) LIMITED et al.			
<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 8 sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input checked="" type="checkbox"/> sent to the applicant and to the International Bureau a total of 4 sheets, as follows:</p> <p><input checked="" type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (sent to the International Bureau only) a total of (Indicate type and number of electronic carrier(s)) , containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>			
<p>4. This report contains indications relating to the following items:</p> <p><input checked="" type="checkbox"/> Box No. I Basis of the opinion</p> <p><input type="checkbox"/> Box No. II Priority</p> <p><input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p><input type="checkbox"/> Box No. IV Lack of unity of invention</p> <p><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p><input type="checkbox"/> Box No. VI Certain documents cited</p> <p><input type="checkbox"/> Box No. VII Certain defects in the international application</p> <p><input type="checkbox"/> Box No. VIII Certain observations on the international application</p>			
Date of submission of the demand  08.06.2005		Date of completion of this report  14.11.2005	
Name and mailing address of the International preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465		Authorized Officer  Marti, P  Telephone No. +49 89 2399-7858	



**INTERNATIONAL PRELIMINARY REPORT  
ON PATENTABILITY**

International application No.  
PCT/GB2004/003485

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**Box No. I Basis of the report**

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1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following language , which is the language of a translation furnished for the purposes of:
- ☐ international search (under Rules 12.3 and 23.1(b))
  - ☐ publication of the international application (under Rule 12.4)
  - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)
2. With regard to the **elements\*** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

**Description, Pages**

1-31 as originally filed

**Claims, Numbers**

1-17 received on 15.07.2005 with letter of 14.07.2005

**Drawings, Sheets**

1/7-7/7 as originally filed

- ☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing
3. ☐ The amendments have resulted in the cancellation of:
- ☐ the description, pages
  - ☐ the claims, Nos.
  - ☐ the drawings, sheets/figs
  - ☐ the sequence listing (*specify*):
  - ☐ any table(s) related to sequence listing (*specify*):
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
- ☐ the description, pages
  - ☐ the claims, Nos.
  - ☐ the drawings, sheets/figs
  - ☐ the sequence listing (*specify*):
  - ☐ any table(s) related to sequence listing (*specify*):

\* If item 4 applies, some or all of these sheets may be marked "superseded."

**INTERNATIONAL PRELIMINARY REPORT  
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**Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

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**1. Statement**

Novelty (N)	Yes: Claims	3,7,9
	No: Claims	1,2,4-6,8,10-17
Inventive step (IS)	Yes: Claims	
	No: Claims	1-17
Industrial applicability (IA)	Yes: Claims	1-17
	No: Claims	

**2. Citations and explanations (Rule 70.7):**

**see separate sheet**

**Re Item V**

**Reasoned statement with regard to novelty, inventive step or industrial applicability;  
citations and explanations supporting such statement**

1.1 Reference is made to the following documents.

D1: JP 2001 087370 A  
D2: JP 2000 121110 A  
D3: DE 101 57 832 A  
D4: FR-A-2 689 399  
D5: JP 5 261246 A  
D6: JP 5 016660 A  
D7: JP 3 244957 A  
D8: WO 96/30750 A

1.2 The priority document GB20030019318 has been checked, the claimed priority of 16.08.2003 is valid. However, the attention of the applicant is drawn the possible relevance of documents DE 102 49 510 A, WO 2004/062700 and JP2004/141618 A for the subject-matter of claims 1 and 15 before any national or regional, further examination procedure.

2.1 Document D1 discloses an air treatment device comprising a gas or vapour detector comprising a plurality of gas sensors (= odor sensors 6a, 6b); a means to mount a source of air treatment agent to the device (see Fig. 1); and a means to expel a portion of air treatment agent (7a, 7b) from a mounted source of agent, upon detection of a gas or vapour by the detector.

Further, the air treatment agent is passively emanated from the mounted source of air treatment agent (spraying), there is a receptacle for the treatment agent, and the device includes a processor unit.

Hence, the subject-matter of present claim 1 lacks novelty over D1 (Art. 33.2 PCT).

The same applies to the method claim 15.

- 2.2 Document D2 discloses an air treatment device (= air cleaner for rooms) comprising a gas or vapour detector having a gas sensor (= smell sensor, 3); a means to mount a source of air treatment agent to the device (see Fig. 2); and a means to expel a portion of air treatment agent (= aroma generator) from a mounted source of agent, upon detection of a gas or vapour by the detector.

D2 does not disclose that the detector should comprise a plurality of gas sensors. However, the provision of a second sensor can be considered as a routine measure for a person skilled in the art.

Therefore, the subject-matter of claim 1 lacks an inventive step in the light of the disclosure of D2 (Art. 33.3 PCT).

The same applies to claim 15.

- 2.3 D3 discloses an air treatment device (= Vorrichtung zur Duftaufbringung) comprising a gas or vapour detector with a gas sensor (13); a means to mount a source of air treatment agent to the device (see Fig. 1); and a means to expel a portion of air treatment agent (= Gebläse, 10) from a mounted source of agent, upon detection of a gas or vapour by the detector.

D3 further discloses a person sensor but it does not disclose a second gas sensor. However, the provision of a second sensor can be considered as a routine measure for a person skilled in the art.

Hence, the subject-matter of claim 1 lacks an inventive step in the light of the disclosure of D3 (Art. 33.3 PCT).

The same applies to claim 15.

- 2.4 D4 discloses an air treatment device (= appareils d'assainissement d'air) comprising a gas or vapour detector with a gas sensor (= détecteur de fumée, 240); a means to mount a source of air treatment agent (22) to the device (see Fig. 3); and a means to expel a portion of air treatment agent (11) from a mounted source of agent, upon detection of a gas or vapour by the detector.

D4 does not disclose a plurality of gas sensors. However, the provision of a second

sensor can be considered as a routine measure for a person skilled in the art.

Hence, the subject-matter of claim 1 lacks an inventive step in the light of the disclosure of D4 (Art. 33.3 PCT).

The same applies to claim 15.

- 2.5 D5 discloses an air treatment device (= deodorising device) comprising a gas or vapour detector including a plurality of gas sensors (first gas sensor and second gas sensor); a means to mount a source of air treatment agent to the device (see Fig. 1); and a means to expel a portion of air treatment agent (6) from a mounted source of agent, upon detection of a gas or vapour by the detector.

Hence, the subject-matter of claim 1 lacks novelty over D5 (Art. 33.2 PCT).

The same applies to claim 15.

- 2.6 D6 discloses an air treatment device (= deodorising and aromatising device) comprising a gas or vapour detector including a plurality of gas sensors (17, 19); a means to mount a source of air treatment agent to the device (see Fig. 1); and a means to expel a portion of air treatment agent (15) from a mounted source of agent, upon detection of a gas or vapour by the detector.

Hence, the subject-matter of claim 1 lacks novelty over D6 (Art. 33.2 PCT).

The same applies to claim 15.

3. Dependent claims 2-14 and 16-17 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of novelty and/or inventive step, the reasons being as follows:

- 3.1 The features of dependent claims 2, 4-6, 8, 11-14 and 16-17 are known from D1-D6.

- 3.2 Claim 3. The use of a heater is already known from at least D3 (= Heizung, 15).

- 3.3 Dependent claim 7 defines that the detector includes a sensor for detecting a target airborne and a second sensor for detecting a non-target airborne.

The problem to be solved over D1 would be therefore the provision of an air treatment device which avoids wasting air treatment agent resulting from a false detection.

Document D7 discloses a system for detecting aroma comprising a first sensor (= gas sensor A) and a second sensor (= gas sensor B), wherein the first sensor detects a non-target airborne agent (= various gases in the air) and a target airborne agent (= **component** of a perfume volatilised in the air), and the second sensor detects the non-target agent but not the target agent. The outputs of the sensors A and B are inputted into a voltage arithmetic unit and an arithmetic operation is executed by deducting the component (target airborne agent) voltage value by the gas sensor B from the component (target airborne agent) voltage value by the gas sensor A. Upon comparison, if the voltage value of the target airborne agent is lower than a reference value, an ON signal is outputted.

A skilled person looking for a way to solve the above mentioned problem would obviously consider the teaching of D7 in order to arrive at the proposed solution. Consequently, the subject-matter of dependent claim 7 does not involve an inventive step in the light of the disclosures of D1 and D7 (Art. 33.3 PCT).

- 3.4 Dependent claim 9 contains only matter of normal design procedure and does not involve an inventive step as no particular or unexpected effect is apparent (Art. 33.3 PCT). Moreover, a detector comprising conducting polymer sensors is already known from D8.
4. It is still not clear which part of the application could serve as a basis for a new independent claim fulfilling the requirements of Art. 33.2 and 33.3 PCT. Should the applicant nevertheless regard some particular matter as inventive, an independent claim should be filed taking account of Rule 6.3(b) PCT. The applicant should also indicate in the letter of reply the difference of the subject-matter of the new claim vis-à-vis the state of the art and the significance thereof.

**INTERNATIONAL PRELIMINARY  
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(SEPARATE SHEET)**

International application No.

PCT/GB2004/003485